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PRINCIPAL INVESTIGATOR: Graham Colditz, M.D.

CONTRACTING ORGANIZATION: Brigham and Women's Hospital
Boston, Massachusetts 02115

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Graham Colditz, M.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Brigham and Women's Hospital
Boston, MA 02115

E-Mail:

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13. ABSTRACT ***(Maximum 200 Words)***

We propose a training grant to recruit and train two postdoctoral students and three physicians. These trainees will acquire skills in the epidemiology and prevention of breast cancer. They will work closely with mentors who have a long track record of training epidemiologists. The funding will allow our research group to focus specific training opportunities on breast cancer. The ongoing epidemiologic studies and prevention trials offer a unique resource in which train ees can participate in cutting edge research and acquire skills that will establis them as future leaders.

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Introduction

We have proposed a training grant to recruit and train two doctoral students and three physicians. These trainees will acquire skills in the epidemiology and prevention of breast cancer. They will work closely with mentors who have a long track record of training epidemiologists. The funding will allow our research group to focus specific training opportunities on breast cancer. The ongoing epidemiologic studies and prevention trials offer a unique resource in which trainees can participate in cutting edge research and acquire skills that will establish them as future leaders.

Approved Statement of Work (italicized)

We will advertise and recruit one predoctoral candidate for the first year of this proposed training program. We did not recruit in the first year (year one was expected to begin 7/1/00) due to funding not being received until September 2000 we were delayed in starting the recruitment process.

We will advertise and recruit one physician for a 2-year training opportunity that includes course work in the first year and research on one of the ongoing studies in the second year. We have recruited Dr. Ann Partridge, MD whose research focuses on the assessment, perception and communication of breast cancer risk as well as other aspects of provider-patient communication in oncology. Other projects she is involved in include breast cancer prevention and adherence with oral antineoplastic agents. This year she was involved in starting a breast cancer chemoprevention study in conjunction with the Cancer Risk and Prevention Clinic at Dana-Farber and the Nurses' Health Study. This study, a randomized placebo controlled trial, will assess the safety and feasibility of utilizing an aromatase inhibitor for breast cancer prevention in women who are at high risk for breast cancer based on an elevated estradiol level. See the reportable outcomes section for other recent accomplishments.

We will recruit a second predoctoral candidate to begin training in the second year. During the second year we will advertise for two physicians to begin training in the third year. We have recruited two predoctoral students, Heather Baer and Heather Eliassen, to make up for the first year. We have not begun to recruit the two physicians for the third year.

During the first year we will develop and implement an advanced seminar in breast cancer. This will bring new depth to course work not previously available at the Harvard School of Public Health. This seminar will cover topics in detail and will span from basic biology of the breast, to early lesions, epidemiologic risk factors, statistical models of breast cancer incidence and issues in risk stratification and counseling for prevention. The Breast Cancer Program of Dana Faber/Harvard Cancer Center has run a monthly seminar in unsolved research issues for Breast Cancer. This has been attended by the physician-trainee.

Key Research Accomplishments

- We have successfully recruited two pre-doctoral fellows.
- We have successfully recruited a post-doctoral, physician trainee.
- We have our physician trainee attending an advanced seminar in breast cancer.

Reportable Outcomes

•Abstract with Dr. Ann Partidge as first author (1)(Appendix A).

•Oral Presentation of this abstract (1) by Dr. Partridge at the American Society of Clinical Oncology (ASCO) which resulted in a Merit Scholarship from ASCO.

•Dr. Partridge also received an ASCO Young Investigator's Award for another project entitled "Oncologists' practices, preferences, and attitudes regarding providing clinical trial participants feedback on the results of trials". She hopes to begin this trial in the coming weeks.

Conclusions

Training that is focused on breast cancer epidemiology and prevention is essential to establish the next generation of leaders is translational research that will speed the prevention of breast cancer through application of our growing knowledge base. A training program that builds on the strong epidemiological research already ongoing at Brigham and Womens' Hospital and bridges to the clinical setting will provide trainees with both quantitative skills and a detailed understanding of issues in translation form research to clinical practice. We are recruiting on schedule now and our trainees are proving to be very worthy of being selected for this program as is exemplified by Dr. Partridge's research.

References

1. Non-Adherence with Adjuvent Tamoxifen Therapy in Women with Early Stage Breast Cancer. *A. H. Partridge, P. S. Wang, E. P. Winer, J. L. Avorn, Dana-Farber Cancer Institute, Boston, MA; Brigham and Womens' Hospital, Boston, MA*

948 ORAL PRESENTATION, SAT, 8:00 AM - 12:00 PM

Satisfaction and Anxiety Are Improved with the Use of an Easy-To-Read Informed Consent Document: a Randomized Multi-Group Study. *P. C. Raich, R. Xu, C. Coyne, K. D. Plomer, M. Dignan, L. Wenzel, D. Fairclough, A. Marcus, T. Habermann, L. Schnell, S. Quella, D. Cella; AMC Cancer Research Center, Denver, CO; Eastern Cooperative Oncology Group, Boston, MA; West Virginia University, Morgantown, WV; University of Alabama-Birmingham, Birmingham, AL; University of California Irvine, Irvine, CA; Mayo Clinic, Rochester, MN; Metro-Minnesota CCOP, Minneapolis, MN; North Central Cancer Treatment Group, Rochester, MN; Evanston-Northwestern Healthcare, Evanston, IL*

Informed consent is a requisite process for subject participation in clinical research. The consent document is a major component of this consent process. Most consent documents for cooperative group cancer treatment trials are written at a 12th to 18th grade reading level, while half of the US population has reading skills at an 8th grade level or below. In order to address this problem, we conducted a randomized multi-group trial with institutions from the ECOG, the NCCTG, and the Cancer and Leukemia Group B. Forty-six sites were randomized to administer either an easy-to-read (low literacy, 7–8th grade) or the standard consent form (13th grade) for three cancer treatment trials. Of 226 subjects entered into the study, 207 completed a telephone interview within one week after their decision to participate in the treatment trial. Primary endpoints assessed during the structured interview include comprehension of consent content, satisfaction with the consent document, and anxiety associated with the decision process; secondary endpoints include decisional conflict and trial participation. Subjects were distributed equally between the two arms by gender, race, age, educational and literacy level, state anxiety and coping style. Although comprehension of consent content did not differ between the two groups (p=0.21), patients receiving the easy-to-read consent document fared better than those receiving the standard document in terms of overall satisfaction with the consent document (p=0.004) and decreased anxiety associated with the consent process (p=0.016). Significant positive correlations were also found between satisfaction and consent anxiety, decisional conflict, and comprehension. Results suggest that a consent document that is easier to read could enhance satisfaction with the clinical trial process, reduce associated anxiety, and potentially enhance clinical trial participation. Supported in part by NCI grant CA72592.

949 ORAL PRESENTATION, SAT, 8:00 AM - 12:00 PM

Informed Consent to Cancer Clinical Trials. *S. Joffe, E. F. Cook, P. D. Cleary, J. W. Clark, J. C. Weeks; Dana-Farber Cancer Institute, Boston, MA; Brigham and Women's Hospital, Boston, MA; Harvard Medical School, Boston, MA; Massachusetts General Hospital, Boston, MA*

BACKGROUND: Researchers must obtain informed consent before enrolling subjects in clinical trials. We sought to measure the quality of informed consent in cancer clinical trials, to identify correlates of subjects' knowledge, and to assess providers' understandings of key elements of informed consent. METHODS: We sent a standardized questionnaire, the Quality of Informed Consent (QuIC), to 287 adult cancer patients who had recently enrolled in a clinical trial at Dana-Farber Cancer Institute, Massachusetts General Hospital or Brigham and Women's Hospital. We also surveyed each subject's provider. RESULTS: 207 subjects (72%) responded. The mean Knowledge Score was 77.8/100 (standard deviation 9.4, range 57.7-100). In a linear regression model, college education (β=5.2, 95% confidence interval [CI] 2.8–7.6), speaking English only (β=10.0, CI=4.6-15.3), adherence to the National Cancer Institute consent form template (β=3.0, CI=0.2–5.8), not signing the consent form at the initial discussion (β=3.0, CI=0.3–5.7), the presence of a nurse (β=2.5, CI=0.1–5.0), and careful reading of the consent form (β=3.9, CI=0.7–7.2) predicted improved knowledge. Many subjects failed to recognize non-standard therapy (74%), the potential for incremental risk from research participation (63%), the unproven nature of the treatment being studied (70%), the uncertainty of benefits to self (29%), or that trials are conducted primarily to benefit future patients (25%). Most respondents (90%) were satisfied with the informed consent process, and most considered themselves to be well-informed (median Self-Assessment Score 89.3/100). Only 28/61 providers (46%) recognized that the main reason clinical trials are done is to benefit future patients. CONCLUSIONS: The therapeutic misconception (the belief that all aspects of a clinical trial are designed to benefit the subject directly) is common among subjects in cancer clinical trials. Physician-investigators may share this misconception. Efforts to educate both providers and potential subjects about the underlying goals of cancer clinical trials are needed.

950 ORAL PRESENTATION, SAT, 8:00 AM - 12:00 PM

Non-Adherence with Adjuvant Tamoxifen Therapy in Women with Early Stage Breast Cancer. *A. H. Partridge, P. S. Wang, E. P. Winer, J. L. Avorn; Dana-Farber Cancer Institute, Boston, MA; Brigham and Women's Hospital, Boston, MA*

Non-adherence with tamoxifen therapy was evaluated in a population-based sample of women newly initiated on the drug for adjuvant breast cancer treatment. We studied all filled prescriptions among continuously enrolled patients age ≥18 years in New Jersey's Medicaid and Pharmaceutical Assistance to the Aged and Disabled programs who filled a first prescription for tamoxifen from 1990–1996 (N= 2356). The number of "days covered" by filled tamoxifen prescriptions in the 365-day period following initiation of therapy was calculated, and patients' demographic and clinical characteristics were assessed. Main outcome measures were the proportion of days during the study year for which patients had filled prescriptions for tamoxifen, and predictors of good vs. poor adherence. Results: Patients filled prescriptions for tamoxifen for a mean of 79% of days in the study year. Approximately 30% of patients had fewer than 80% of days with drug available during the year. Multivariable analysis indicated that patients at the extremes of age (≤45 and ≥85 years), and nonwhite patients had significantly lower rates of adherence, after adjusting for possible confounders. After excluding patients with an identifiable reason for possible therapeutic discontinuation of tamoxifen during the study year, predictors and overall adherence did not change substantially. Conclusions: The mean level of adherence to tamoxifen during the first year of therapy is higher than rates seen with other chronic medications, but nearly a third of patients may be at risk for inadequate clinical response because of poor adherence. Such poor adherence can not be predicted using demographic or clinical data, with the exception of age and race. Despite the efficacy of tamoxifen therapy in preventing recurrence and death in women with early stage breast cancer, further efforts are necessary to document and prevent suboptimal adherence, particularly in younger, older, and non-white populations.

951 ORAL PRESENTATION, SAT, 8:00 AM - 12:00 PM

The Effect of Hospital Volume and Socioeconomic Status on Colostomy Rates for Rectal Cancer. *D. C. Hodgson, W. Zhang, C. S. Fuchs, A. M. Zaslavsky, W. E. Wright, J. Z. Ayanian; Princess Margaret Hospital, Toronto, ON, Canada; Department of Health Care Policy, Harvard Medical School, Boston, MA; Dana Farber Cancer Institute, Harvard Medical School, Boston, MA; California Cancer Registry, Sacramento, CA*

Background: For rectal cancer patients, colostomy is associated with significant impairment of quality of life. There is little information about the impact of surgical case-volume or patient demographics on the risk of undergoing permanent colostomy for rectal cancer. Methods: From the California Cancer Registry, we identified 7,047 patients with stage I-III rectal cancer undergoing surgery from 1994–1997. Surgical procedures were identified from hospital discharge abstracts. The outcome measure was the performance of colostomy within 4 months of diagnosis and no reversal within one year. We adjusted for patient age, sex, race, comorbidity, socioeconomic status (SES), tumor stage and location using multiple logistic regression. SES was measured using the proportion of adults with a college degree in a patient's zip code. Results: Patients undergoing surgery in hospitals with greater case-volume, or living in higher SES communities were significantly less likely to undergo permanent colostomy in unadjusted (P< 0.001, Mantel-Haenzel) and adjusted analyses. Other significant independent predictors were male gender, non-Asian race, advanced tumor stage, distal tumor location and greater comorbidity. Conclusion: Greater hospital case-volume and higher SES are associated with a lower risk of undergoing permanent colostomy. The practice patterns underlying these findings should be investigated so that sphincter preservation can be achieved for all eligible patients.

Hospital Case Load (Rectal Cancer Cases/Year)	Unadjusted Colostomy Rate	Adjusted OR of Colostomy
≤ 7	36.1%	1.39*
7 -13	34.6%	1.31*
14- 20	31.1%	1.19*
>20 (ref)	28.3%	1.00
SES Quartiles (% With College Education)		
≤21.1	38.0%	1.00
21.2-29.5	33.5%	0.81*
29.5-41.2	30.7%	0.74*
>41.2	27.0%	0.65*

*P<0.01 compared to baseline.

Appendix A